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| 10/788,802 | 02/27/2004 | Alexander J. Somogyi | ORACL-01338US2 | 7862 |
| 80548 | 7590 | 12/17/2009 | EXAMINER | |
| FLIESLER MEYER LLP 650 CALIFORNIA STREET 14TH FLOOR SAN FRANCISCO, CA 94108 | | | TRUONG, CAMQUY | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2195 | |
| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 12/17/2009 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/788,802 | Applicant(s) SOMOGYI, ALEXANDER J. | |
| | Examiner CAMQUY TRUONG | Art Unit 2195 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-20, 22-29 and 31-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-20, 22-29 and 31-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 12-20, 22-29 and 31-33 are presented for examination. Claims 1-11, 21 and 30 have been cancelled.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after the final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/12/09 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 12-20, 22-29 and 31-33 are rejected under 35 U.S.C 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The claim language in the following claim is not clearly understood:

i. As to claim 12, line 7, it is not clearly indicated whether "resource" refers to "resource object" in line 5. If it is the same Applicant should use the same

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language; Lines 9-11, it is not clearly indicated how " the wrapper object " is used to synchronized with " the concurrent enlistment requests" (i.e. the wrapper object receives the concurrent enlistment request); Lines 15-18, it is not clearly understood how " the enlistment data structure" relates to " " first checks to ..." (i.e. using the enlistment data structure to checks to see ...).

ii. Claims 22 and 31 have the same problem as claim 12; therefore, they are rejected for the same reason as claim 12 above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12-20, 22-29 and 31-32 are rejected under 35 U.S.C. 103 as being unpatentable over Fujita (U.S. 6,411, 985) in view of Connor (U.S. 6,865,549), and further in view of Orton et al. (U.S. Patent 5,465,363).

5. As to claims 12, 22 and 31, Fujita teaches the invention substantially as claimed including: a system for interleaving resource enlistment synchronization, comprising:
an application server with a plurality of threads, running on one or more processors (the main business server of the main center (computers system) runs an

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application program perform transaction. Each transaction is a set of processes (threads), col. 8, lines 44-59);

a transaction manager (transmission server 2, col. 24, line 8), wherein the transaction manager maintains an enlistment data structure to manage resource object enlistment in a plurality of transaction (table 30b defines a resource identifier associated with the type of transaction, col. 24, lines 2-28), wherein each transaction is associated with one or more different said threads (sequence of processes, col. 8, lines 55-56), and wherein the enlistment data structure maintains a mapping of resource and transaction identification information (col. 12, lines 23-30).

6. Fujita does not explicitly teach after the transaction manager receives a request from one thread of the plurality of threads to enlist one of the one or more resource objects in one transaction, the manager first checks to see if there is a lock being held on the resource object by another thread in another transaction; if not, grants a lock to an accessor associated with the thread and holds the lock until an owner of the thread delists the resource object. However, Connor teaches after the transaction manager receives a request from one thread of the plurality of threads to enlist one of the one or more resource objects in one transaction (controller 302 registers with controller service 320 to receive controller ID 304 and lease object 306, col. 10, lines 60-62; col. 5, lines 32-39), the transaction manager

first checks to see if there is a lock being held on the resource object by another thread in another transaction (the system determines if controller 302

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holds a lock on the lockable resource (step 504 or the lock can be controlled by different controllers, col. 5, lines 51-53; col. 6, lines 22-25);

if not, grants a lock to an accessor associated with the thread (the system causes controller 302 to be noted as the lock owner, col. 5, lines 66-67) and holds the lock until an owner of the thread delists the resource object (col. 5, lines 7-30).

7. It would have been obvious to one of ordinary skill in the art at the time the invention was made that to modify the teaching of Fujita to incorporate the teaching of after the transaction manager receives a request from one thread of the plurality of threads to enlist one of the one or more resource objects in one transaction, the manager first checks to see if there is a lock being held on the resource object by another thread in another transaction; if not, grants a lock to an accessor associated with the thread and holds the lock until an owner of the thread delists the resource object as taught by Connor because this allow to prevent conflicting controllers from controlling critical sections of the same lockable resource at the same time.

8. Fujita and Connor do not explicitly teach one or more resource objects, wherein each resource object is wrapped with a wrapper object, wherein the transaction manager uses the wrapper object to synchronize concurrent enlistment requests. However, Orton teaches one or more resource objects (non-multitask safe object, col. 16, lines 46-49), wherein each resource object is wrapped with a wrapper object (non-

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multitask-safe object which is "caught" and implemented by the multitask-safe object wrapper, col. 16, lines 46-49; col. 18, lines 20-25), wherein the transaction manager uses the wrapper object to synchronize concurrent enlistment requests (col. 18, lines 34-42; col. 18, line 63 – col. 19, line 4).

9. It would have been obvious to one of ordinary skill in the art at the time the invention was made that to modify the teaching of Fujita and Connor to incorporate the teaching of an application server with a plurality of threads, running on one or more processors; one or more resource objects, wherein each resource object is wrapped with a wrapper object, wherein the transaction manager uses the wrapper object to synchronize concurrent enlistment requests as taught by Orton in order to gain the advantage of possible to use objects that are not task-safe in a multitasking environment without modifying or understanding the internal workings of the said objects.

10. As to claims 13, 23 and 32, Orton teaches the transaction manager maintains a collection of wrapper objects that wraps the one or more resource objects (non-multitask-safe object which is "caught" and implemented by the multitask-safe object wrapper, col. 16, lines 46-59; col. 18, lines 20-25).

11. As to claims 14 and 24, Connor teaches the collection of wrapper objects is

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periodically processed to remove objects that are unused or no longer active (col. 5, lines 28-30).

12. As to claim 15, Orton teaches teach of the one or more resource objects resides in a server node (col. 18, lines 15-26).

13. As to claims 16 and 25, Orton teaches the transaction manager signals to one or more waiting threads once a lock is free (col. 18, lines 53-55).

14. As to claims 17 and 26, Connor teaches the transaction manager use a priority method to determine which thread will be granted a lock (col. 1, lines 33-40).

15. As to claims 18 and 27, Orton teaches after obtains a lock, the thread uses the wrapper object to initiate work on the resource object (col. 18, lines 21-26).

16. As to claims 19 and 28, Orton teaches the wrapper object receives a delist call from the transaction manager and send an end call to the resource object to end work performed by the resource object associated with the thread and release the lock on the resource object (col. 18, lines 34-42).

17. As to claims 20 and 29, Connor teaches once the transaction manager enlists

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the resource object and obtains a lock to the resource object, any attempted enlist from a second thread is blocked (col. 6, lines 19-35).

18. Claims 33 is rejected under 35 U.S.C. 103 as being unpatentable over Fujita (U.S. 6,411, 985) in view of Connor (U.S. 6,865,549), and further in view of Orton et al. (U.S. Patent 5,465,363), as applied to claim 22 above, and further in view of Kuftedjian (U.S. 6,105,057).

19. As to claim 33, Fujita, Connor and Orton do not explicitly teach determining, via the transaction manager, whether an application associated with the thread is a specific type of application; granting, via the transaction manager, the thread a lock only when the application is determined to be the specific type of application. However, Kuftedjian teaches determining, via the transaction manager, whether an application associated with the thread is a specific type of application (col. 5, lines 25-37); granting, via the transaction manager, the thread a lock only when the application is determined to be the specific type of application (col. 8, lines 58-65).

20. It would have been obvious to one of ordinary skill in the art at the time the invention was made that to modify the teaching of Fujita, Connor and Orton to incorporate the teaching of determining, via the transaction manager, whether an application associated with the thread is a specific type of application; granting, via the transaction manager, the thread a lock only when the application is determined to be

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the specific type of application as taught by Kuftedjian because this allow grant the lock to application base on the type of application; thereby, improving the system's performance.

Response to the argument

21. Applicant's arguments filed 8/7/09 for claims 12-20, 22-29 and 31-33 have been considered but are moot in view of the new ground(s) rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CAMQUY TRUONG whose telephone number is (571)272-3773. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng Ai An can be reached on (571)272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

Camquy Truong

November 24, 2009